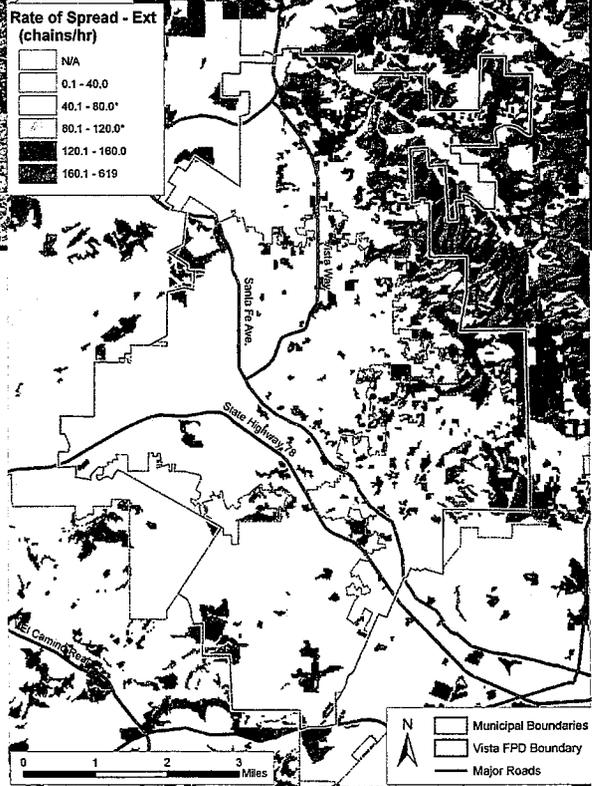
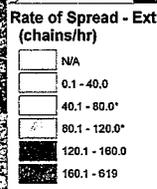


# Vista Fire Protection District

## *Wildland Urban Interface*

### *Community Wildfire Protection Plan*



Prepared for:  
**Vista Fire Protection District**  
**Vista, California**

Submitted By:  
**Anchor Point**  
**Boulder, Colorado**

December 2, 2005



# ***Community Wildfire Protection Plan***

**City of Vista**

**San Diego County, CA**

**May 3, 2010**

## **Introduction**

This Community Wildfire Protection Plan (CWPP) was developed by the City of Vista with guidance and support from the County of San Diego, California Department of Forestry and Fire Protection and the Greater Vista Fire Safe Council. This CWPP supplements San Diego County, Department of Planning and Land Use documents referenced in Appendix A.

# ***Community Wildfire Protection Plan***

**City of Vista**

**San Diego County, CA**

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## **Introduction**

The wildland fire problem in the City of Vista is based upon the expanse of wildland urban interface within the city. This intermingling of homes and vegetation poses a significant risk to the residents of these areas in the event of a wildfire. The potential problems that could occur include threats to lives, property and the environment. The development of a Community Wildfire Protection Plan will assist the city by mitigating the wildland fire problem in a coordinated and managed method. Many stakeholders are impacted by this plan, including multiple departments within the city. The City of Vista CWPP will be the central guiding document that charts the course of change in the city in relation to wildland management and wildfire mitigation.

The Vista CWPP will address the major wildland concerns:

- Community egress and emergency vehicle ingress during a wildfire
- Public awareness of wildfire threat and methods for mitigating the threat
- Reduction of structural ignitability
- Adoption of coordinated construction and maintenance codes that support prudent wildland urban interface living

## SECTION I: COLLABORATION

### A: Community / Agencies / Fire Safe Councils

Representatives involved in the development of the Vista CWPP are included in the following table. Their organization, and roles and responsibilities are indicated below:

#### CWPP Development Team:

Organization	Roles / Responsibilities
Vista Fire Department	Primary development of CWPP and decision-making, community risk and value assessment, development of community protection priorities, and establishment of fuels treatment project areas and methods.
Vista Community Emergency Response Team (CERT)	Provide input and information regarding local hazards and community values at risk.
Greater Vista Fire Safe Council	Provide input during meetings and from the Vista Fire Protection District CWPP dd. December 2005
Vista Building Department	Provide input and information regarding current and future status of building codes and regulations.
Vista Planning Department	Provide input and information.

Cal Fire	Provide guidance and direction as well as various reports and maps used for decision making and priority setting.
County of San Diego	Provide input and information specifically maps and data regarding fire history, hazards at risk, wildland urban interface and fuel types.

Community involvement has been ongoing and included two meetings held at fire station number one on August 18, 2008 following an announcement in the local newspaper. These meetings were attended by city residents as well as residents of the neighboring Vista Fire Protection District. Additional feedback has been received from the Greater Vista Fire Safe Council and members of the Vista Fire Protection District board of directors during two meetings. During the development of the CWPP the city has constructed and staffed two additional fire stations for a total of six fire stations. The ongoing process has included feedback and support from the County of San Diego and the Fire Safe Council of San Diego County.

As the CWPP process has been ongoing the city has adopted the Very High Fire Hazard Severity Zone map published by Cal-Fire. Comments, concerns and suggestions identified during these meetings have been incorporated into the CWPP. The adoption process of the VHFHSZ map has generated public feedback that has been utilized in the development and prioritization of projects identified in this document. Specific changes have been adopted by Cal-Fire regarding the location and size of the very high fire hazard severity zones. Some of these changes have been approved by Cal-Fire.

Additional comments have been received independent of any formal meetings as written documentation or oral information.

The collaborative effort of the CWPP has already yielded benefits. The process of obtaining information from various local, county and state agencies has resulted in a better understanding within the city of the goals and objectives of each agency and department. The impact locally has been an increased coordination among various departments and a coordination of efforts towards a common goal. For example, this means that the objectives of the local environmental planning department are now working in concert with the fuel modification goals of the fire department. Additional benefits have been realized by the efforts of the fire department, planning department and building department to address the establishment of appropriate building codes in wildland urban interface areas.

Future collaborative efforts include continued cooperation among city and county departments utilizing the CWPP as a guiding document. Additionally, the CWPP and companion vegetation management guidelines will be used in public education situations to provide homeowners, developers and others with a clear understanding of fire safety and fire mitigation goals and strategies.

## **B. Community Overview**

The City of Vista is located in Northern San Diego County approximately 7 miles east of the coast. The city is bordered by county land and local jurisdictions including the cities of Oceanside, Carlsbad, San Marcos and Fallbrook. The city covers 18.6 square miles or 11,903 acres. There are approximately 31,000 households and 4,000 businesses in the city and a population of 94,972 according to the 2007 census.

Within the boundaries of the city there are five public high schools, three public middle schools, fifteen elementary schools and a number of private and technical schools. The city is also home to retirement and convalescent homes as well as mobile home parks of primarily elderly residents.

The identified communities at risk are those that are within the very high, high and moderate zones as defined by Cal-Fire in September 2007 and shown in the attached map. The areas defined by Cal-Fire as being within a hazard severity zone are also within the wildland urban interface. One of the needs identified in this document is the need for a comprehensive overview of the wildland fire hazard within the City of Vista. This project would involve the use of a qualified urban forester who would be tasked with providing a scientifically based boundary for the wildland urban interface. The current boundary of the wildland urban interface is based upon the fire hazard severity zones established by Cal-Fire.

The predominant type of vegetation in the city is chaparral (fuel models 4 and 6) and non native exotic vegetation. Consideration must be given to the preponderance of non native stands of unmaintained fuels including eucalyptus, evergreen, and palm trees. Some of these fuels are no longer maintained and pose a significant threat to life and property by their ability to propagate fire spread. The fuels present in Vista pose a significant threat due to their ability to ignite easily and to then spread fire by generating airborne embers. Canyons and valleys do exist in the eastern area of the city that will greatly increase fire spread. Many homes in the wildland urban interface are built on ridgelines and will be severely impacted by a fire.

The predominant weather pattern is a westerly wind from the ocean with mild temperatures and humidity. This normal weather pattern does not typically contribute to large conflagrations but can exacerbate small fires. The presence of adequate fuels in the city can result in fuel driven fires, independent of weather factors. The weather factor that can dramatically impact fire severity is the Santa Ana wind event. The Santa Ana

winds are generated by a higher pressure east of Vista which creates a weather condition in which hot dry winds descend to the Pacific Ocean from inland desert regions. These winds bring lower humidity, higher temperatures and increased wind speeds. These factors all lead to the increased speed and intensity of a fire. Santa Ana winds were instrumental in the level of destruction evidenced in the Harmony Grove fire, the Gavilan fire and the fire storms of 2003 and 2007 in San Diego County.

Despite the many devastating and deadly fires that have occurred in San Diego County the City of Vista has been spared any large wildland fires. The attached map entitled "Fire History, 1910-2007", illustrates the lack of fire in the area of Vista. This indicates that fuels in the area are certainly poised to generate significant heat and fire if ignited.

### **C. Identification of Values at Risk**

#### **1. Structures**

The structures within the wildland urban interface are primarily single family dwellings. The specific areas threatened by wildland fire in the city are listed below along with the primary threat area.

#### **2. Specific areas of contiguous fuels or isolated pockets of fuels**

- a. West of Allesandro Trail due west to Bonair Rd. to north of Beverly Drive
- b. Vale Terrace to Brengle Terrace Park
- c. West of Foothill Drive, north of Calle Sinaloa, south of Foothill Drive
- d. North of Monte Vista School east of Valley Drive
- e. Philips Drive between Mar Vista and Escondido

#### **3. Green Oak Ranch**

#### **4. Area west of South Melrose Drive near fire station 5**

#### **5. Public Works facility (Taylor Street)**

#### **6. Brengle Terrace Park**

#### **7. Vegetation and wildlife**

### **D. Local Preparedness and Firefighting Capability**

The primary firefighting agency that serves the City of Vista is the Vista Fire Department. The department currently operates out of four fire stations with the completion of two additional stations anticipated in March 2009. The Vista Fire Department responds to wildland fires with wildland type III engines, type I engines and a battalion chief. The department also provides paramedic service to the residents of the city. Cal-Fire responds mutual aid to the city and augments the response capability of the

Vista Fire Department. Automatic aid agreements are also in place with surrounding agencies.

The Vista Fire Department is responsible for structure fire, medical aid and other emergency and non-emergency calls for service. The Fire Department staffs a fire prevention bureau that handles vegetation management issues, fire inspections, and fire investigations.

## **SECTION II: PRIORITIZED FUEL REDUCTION**

### **A. Priorities**

1. Develop a comprehensive vegetation management plan including aggressive weed abatement, clearance of dead and dying vegetation, and management of areas identified in section I.C.
2. Clear vegetation at least 30 feet on either side of designated evacuation routes
3. Adopt chapter 7A of the 2007 California Building Code
4. Property owners to replace all wood shake shingle roofs, with the initial focus in the designated Wildland Urban Interface area
5. Additional vegetation management around Thibodo, Brengle Terrace Park and other city properties
6. Removal of dead and dying trees throughout Thibodo and Brengle Terrace Park

### **B. Existing Projects**

#### **Ongoing**

1. Vegetation management focused along evacuation routes
2. Vegetation management around Thibodo Park, Brengle Terrace Park and other city properties abutting private land
3. Vegetation management clearing guide in development with local, state and federal input
4. Improvement of emergency access roads throughout the surrounding Vista Fire Protection District, benefitting both city and district residents
5. Evaluation and education of individual property owners throughout the City of Vista, resulting in reduced vegetation/fuel load and thereby reducing spread potential of fire
6. Application of addresses on all structures
7. Ongoing CERT training for residents of the City of Vista

### **Proposed and awaiting approval**

1. Evacuation route signage
2. Replacement of wood shake roofs by property owners
3. Identification of the wildland urban interface area within the City as defined by Cal Fire and the fire hazard severity zone process
4. Provide two wildland education seminars annually. Seminars are designed to teach the public about methods to protect their property from fire:
  - a. Remove all flammable vegetation or other combustible growth at least 30 feet around any structure.
  - b. Maintain an additional defensible space by removing all brush, flammable vegetation, or combustible growth located within 100 feet of a structure.
  - c. Trim trees for at least 10 feet of clearance around a chimney.
  - d. Remove dead growth from any tree overhanging a building.
  - e. Maintain the roof of a structure free of leaves, needles or other dead vegetative growth.
  - f. Install and maintain spark arrestors on all chimneys

Examples of additional topics to be covered would include, but not be limited to:

- Proper storage of flammable materials
- Storage of firewood away from structures.
- Pruning vegetation to lessen fire propagation.
- Proper disposal of vegetation trimmings.
- Fire-resistant materials for construction, upgrading and hardscaping.
- Protect attic from embers by securing vents with 1/8" mesh or commercially available products

### **SECTION III: TREATMENT OF STRUCTURAL IGNITABILITY**

There are three primary components to the City of Vista CWPP. The first is the reduction of structural ignitability which includes the replacement of wood shake shingle roofs. The second category is broadly defined as fuels reduction. The third category is public education.

The replacement of all wood shake roofs has been identified as a priority to the city, the fire department and the residents that attended the public CWPP meetings. It has been proven repeatedly those homes with wood shake roofs ignite more readily and thereby increase the ember shower impacting other properties. Additionally, homes with wood shake roofs continue to burn after the main fire has left the area and scarce fire resources are required to monitor and/or attempt to extinguish the fire.

Fuels reduction is a broad category that covers large scale tree removal and smaller scale vegetation management around individual structures. The overall goal of the fuels reduction is to disrupt the continuity of the fuel so that the fire spread is stopped or, at a minimum, slowed. In addition to slowing the spread of the fire, the fuels reduction program will assist with keeping fires small.

In order to be effective, the public must be educated about the hazards presented by wildfires and the actions they can take to reduce their vulnerability and increase their safety. There are important steps that the public can take to be proactive and reduce their risk to wildfire; however, education is important so that the most effective steps are taken. The CWPP will provide the overall guidance and prioritization that is necessary for a project of this scope to be successful.

UNINCORPORATED MUNICIPALITY

Mandatory Signature Page

APPLICABLE GOVERNMENT

San Diego County Land Use and  
Environmental Group (SD LUEG)

(Name)

*Ralph Steinboff*  
*Raymond Fernandez*

LOCAL FIRE

Local Fire Department (If  
Outside County Fire Service  
Area)

(Name)

APPLICABLE GOVERNMENT

San Diego County Fire Service Coordinator  
Forestry

(Name)

*x Charles Maner*

STATE AGENCY

California Department of  
and Fire Protection  
Chief Charles Maner

*Other signatures are desirable to show collaboration and acknowledgement. Add additional signatures as needed.*

*Richard Hernandez*

Richard Hernandez, President Vista Fire Protection District Board

*Gary Fisher*

Gary Fisher, Chief Vista Fire Department

*Steve ...*

COUNTY OF SAN DIEGO

## Appendix A: References

### LIST OF REFERENCES:

1. County of San Diego Building Code, Attachment B (2004)
2. County of San Diego Fire Code, Attachment A (August 2004)
3. San Diego of County Code of Regulatory Ordinances, Title 6 Health and Sanitation, Division 8. Sewage and Refuse Disposal, Chapter 4. Removal of Combustible Vegetation and Other Flammable Materials (August 2004)
4. County of San Diego, OES *Hazard Mitigation Plan* (2006)
5. County of San Diego, *Fire, Defensible Space and You...* (2005)
6. County of San Diego, *Fire Safety and Fuels Reduction Program Overview* (2005)
7. <http://frap.cdf.ca.gov> for additional maps, data, and documents
8. <http://www.cafirealliance.org> California Fire Alliance website for additional documents.
9. <http://www.livingwithfire.com> Sample of information from Nevada Living with Fire Program
10. Vista Fire Protection District. Wildland Urban Interface. Community Wildfire Protection Plan. Anchor Point. Boulder, Colorado. December 2005.

## Appendix B: Maps

Map depicting the State identified Fire Hazard Severity Zones

Figure 1: *Fire Threat (modeled by CDF FRAP)*  
Combines expected fire frequency with potential fire behavior to create 5 threat levels.

Figure 2: *Fire History 1910 – 2007 (CDF FRAP)*  
Large fire history, generally 300-acre minimum for CDF fires since 1950 and 10-acre minimum for USFS fires since 1910, but many smaller fires as well.

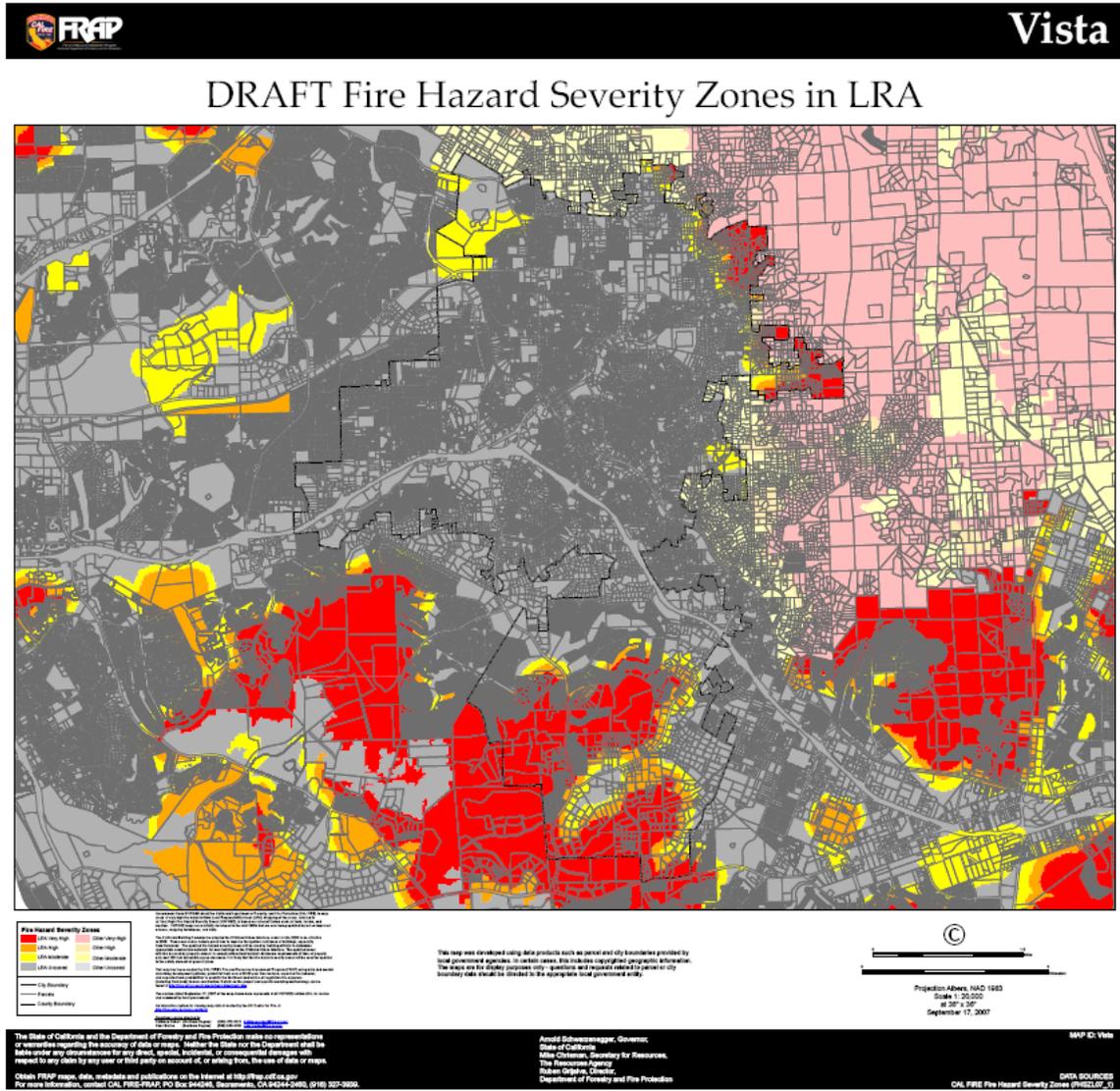
Figure 3: *Public Ownership*

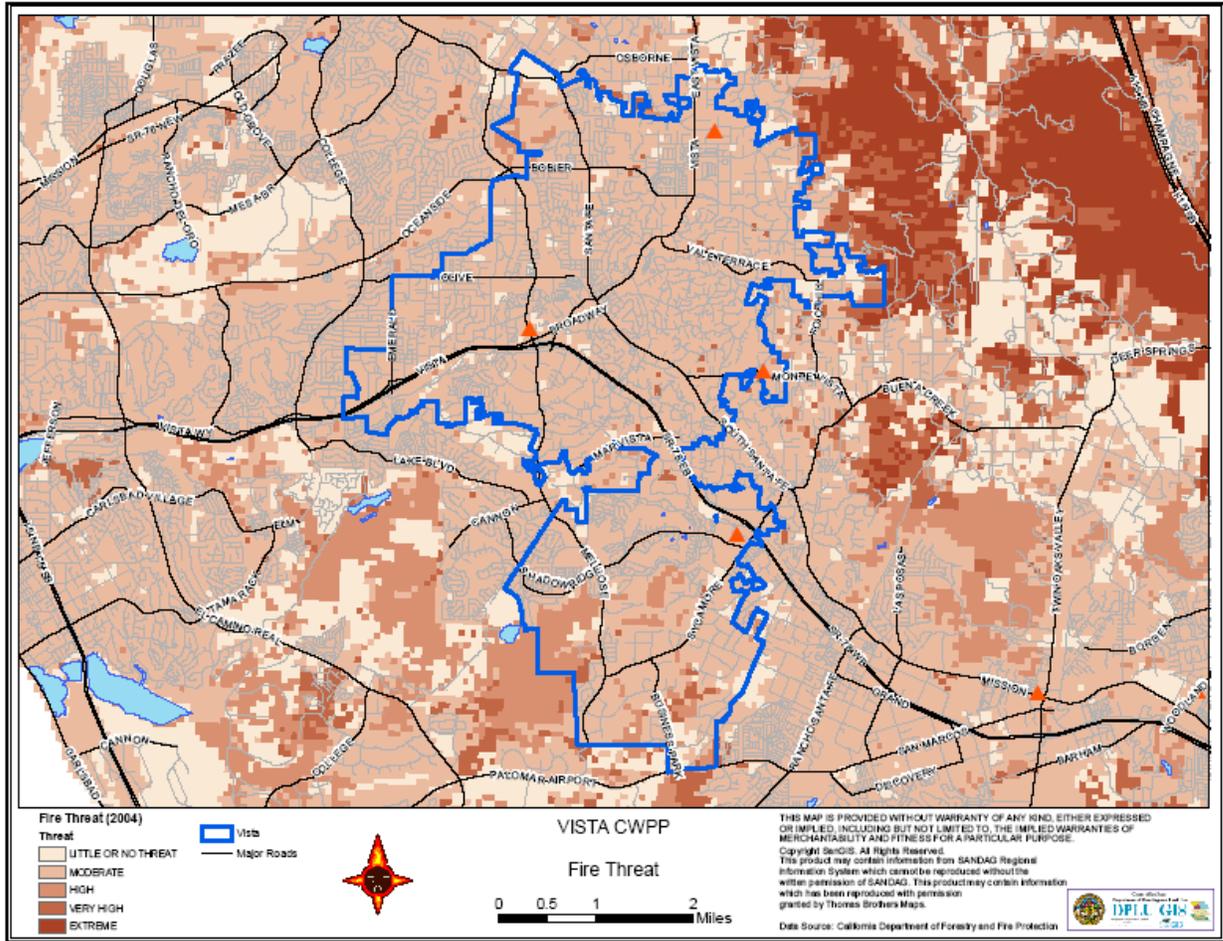
Figure 4: *USGS Topographic Map*

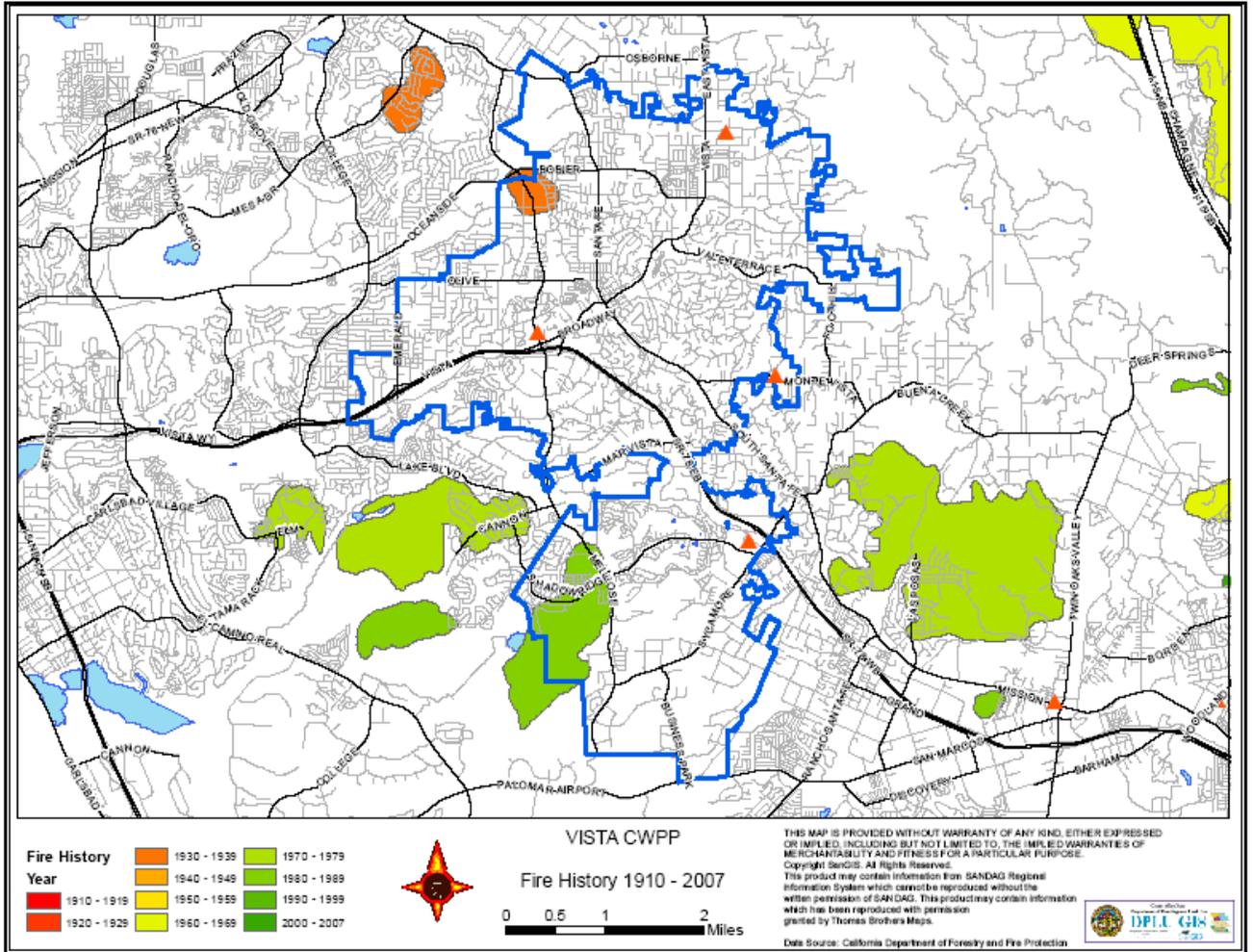
Figure 5: *Fire Threat*  
Fire threat level showing 4 levels

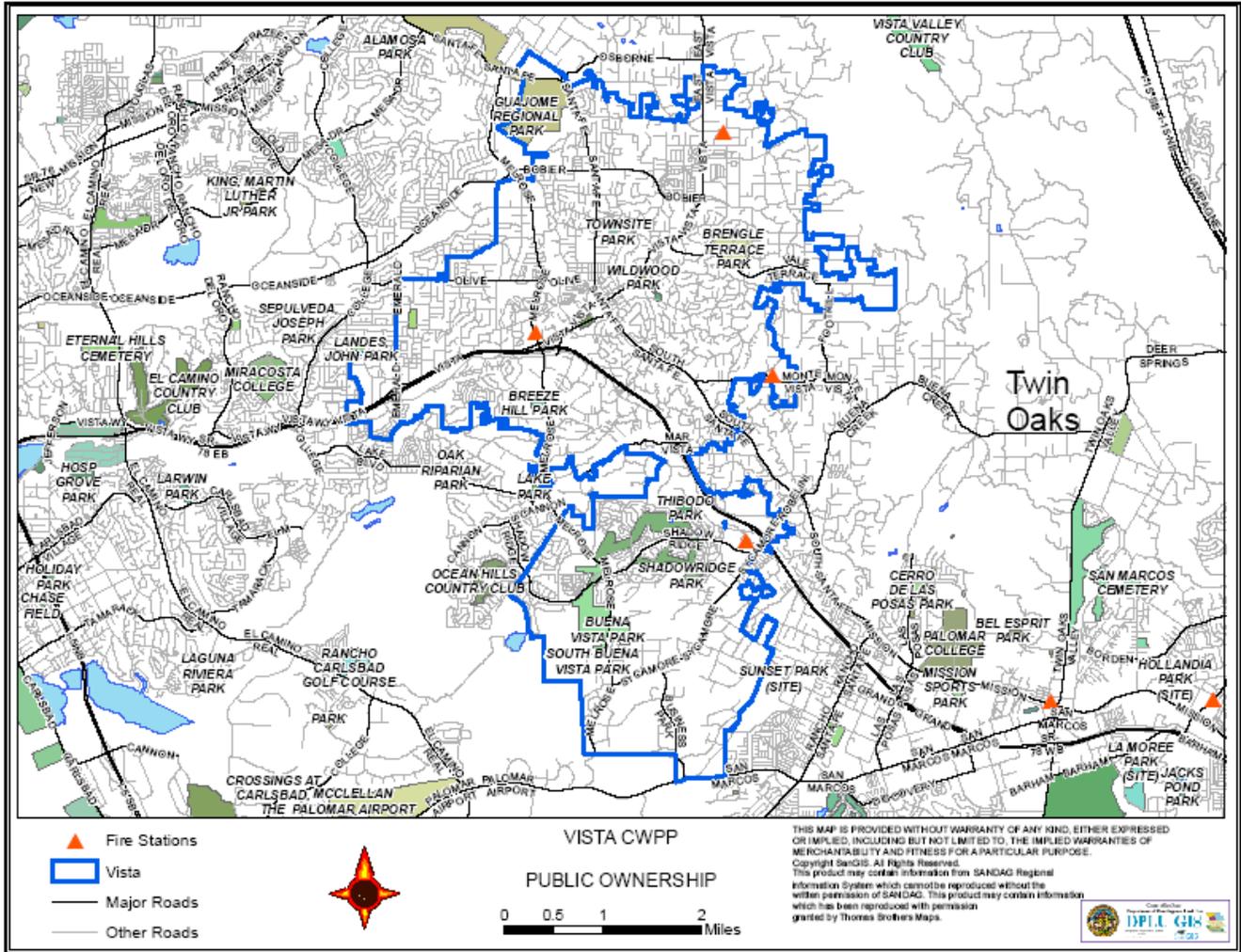
Figure 6: City of Vista Wildland Urban Interface

Figure 7: Visual of fire safe landscape plan

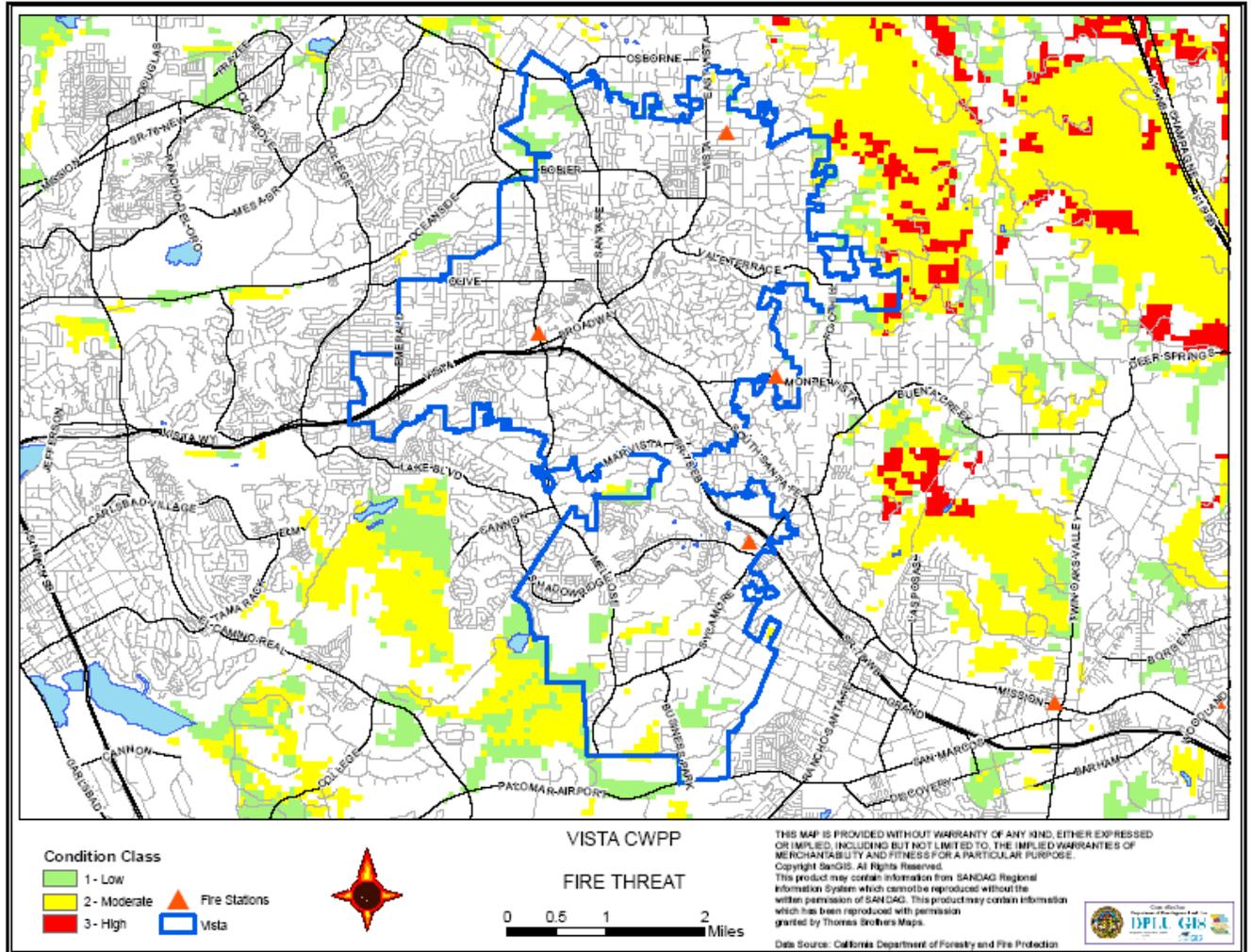












*Fire Threat (modeled by CDF FRAP)*

Combines expected fire frequency with potential fire behavior to create 4 threat classes

# VISTA FIRE DEPARTMENT

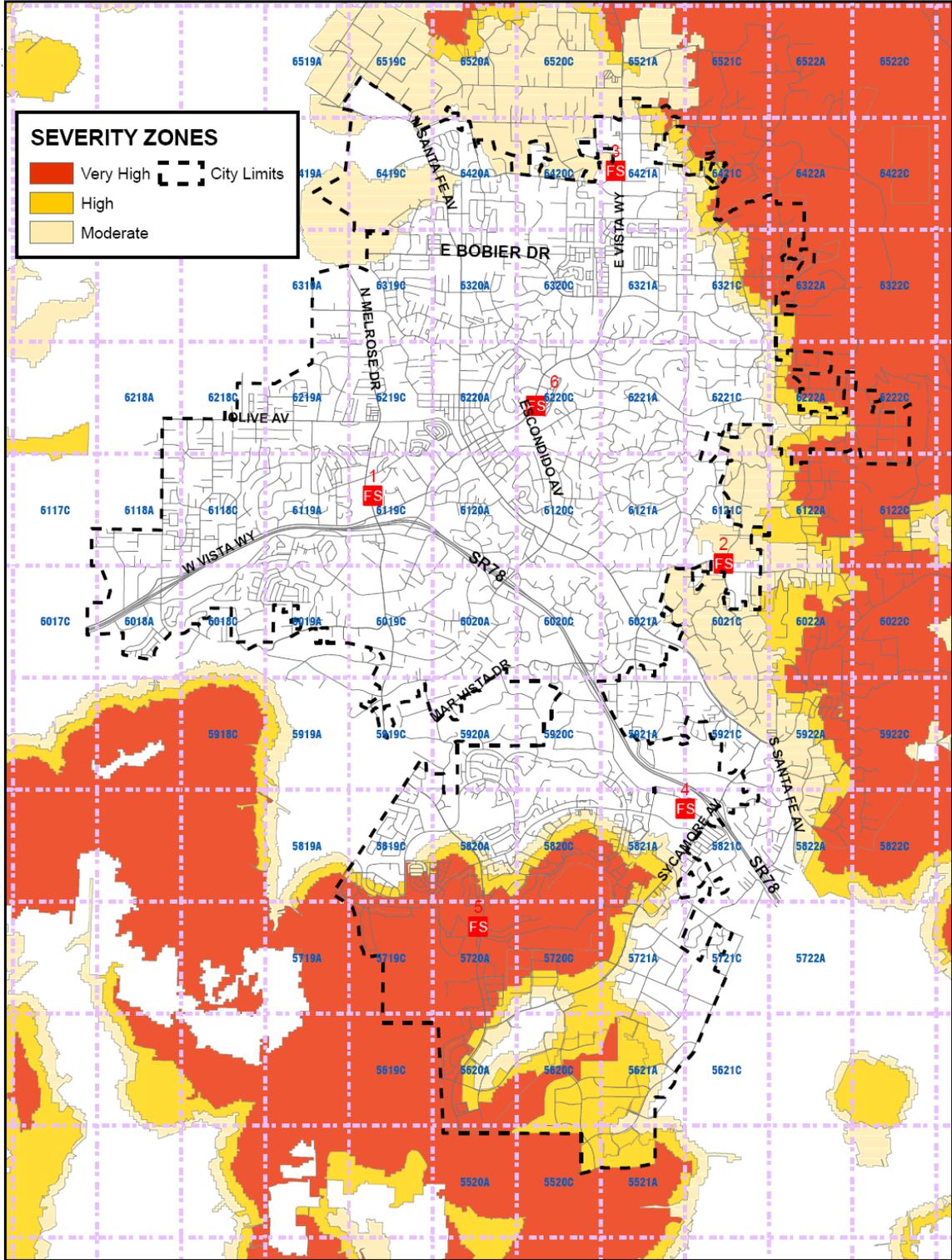
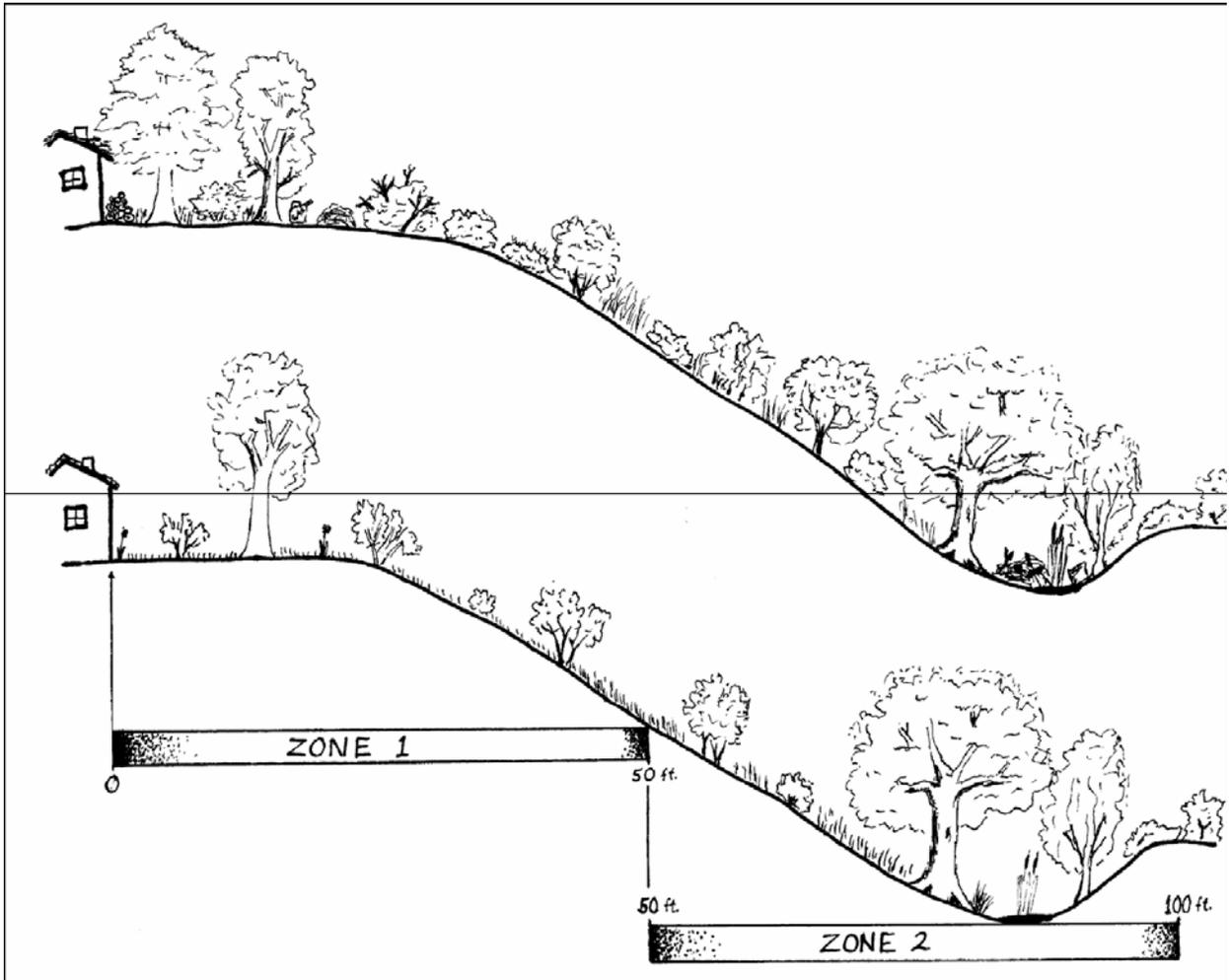


Figure 6: City of Vista Wildland Urban Interface

## Before Fuel Modification



## After Fuel Modification

To create a landscape that will make your home less vulnerable to wildfire, the primary goal is fuel reduction. Think of the area around your home in zones. Zone 1 is closest to the structure; Zone 4 is the farthest away.

**Zone 1** This well-irrigated area encircles the structure for at least 30 feet on all sides, providing space for fire suppression equipment in the event of an emergency. Plants should be limited to carefully spaced fire resistant tree and shrub species.

**Zone 2** Fire resistant plant materials should be used here. Plants should be low-growing, and the irrigation system should extend into this section.

**Zone 3** Place low-growing plants and well-spaced trees in this area, remembering to keep the volume of vegetation (fuel) low.

**Zone 4** This furthest zone from the structure is a natural area. Thin selectively here and remove highly flammable vegetation.